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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,782	06/07/2001	Christina Banta	10010133-1	8851

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EXAMINER

COBANOGLU, DILEK B

ART UNIT

PAPER NUMBER

3626

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/876,782	Applicant(s) BANTA ET AL.	
	Examiner Dilek B. Cobanoglu	Art Unit 3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06/07/2001</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 have been examined.

OBJECTIONS

2. The use of the trademark DICOM has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
3. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. Claims 12 to 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 12 and 22 state a computer readable medium comprising a program to control a computer; it is not clear if the applicant wants to claim a medium or a program.
7. Claims 13 to 21 are also rejected under 35 U.S.C. 112, second paragraph according to the dependency to the claim 12.
8. Claims 23 and 24 are also rejected under 35 U.S.C. 112, second paragraph according to the dependency to the claim 22.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claim 9 is rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

11. In the present case, the claims only recite an abstract idea. Exemplary claim 9 recites a study merging method, comprising merging a patient's first medical study with a logically related second medical study. However, there is no requirement within the recited means to positively and definitely require the technological arts. For example, merging of the medical studies can be done by any person who works for the medical facility by only putting them in a file folder.

(2) whether the invention produces a useful, concrete, and tangible result.

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Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

12. In the present case, the claimed invention does recite a useful, concrete and tangible result; in that it merges medical studies; however such a practical application is not within the technological arts.

13. Claims 12 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Under the statute, the claimed invention must fall into one of the four recognized statutory classes of invention, namely, a process (or method); a machine (or system); an article of manufacture; or a composition of matter.

Examiner assumes that 12th and 22nd claims claim a computer program to control a computer.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1 to 4, 7, 8, 10, 11, 25 and 26 are rejected under 35 U.S.C. 102(b) as being unpatentable by Seliger et al. (U.S. Patent No. 5,546,580).

A. As per claim 1, Seliger et al. discloses a study merging or updating method (Seliger et al.; col.3, lines 6-8), comprising:

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- i. merging or updating a patient's first medical study with a logically related second medical study (Seliger et al.; col.3, lines 8-18 and lines 20-23),
- ii. such that the resultant composite study is the first medical study and has a study identifier of the first medical study (Seliger et al.; col.11, lines 59-65),
- iii. wherein the merging includes an automatic adding of medical information of the second medical study to the first medical study (Seliger et al.; col.5, lines 39-42).

B. As per claim 2, Seliger et al. discloses the study merging method of claim 1, wherein the medical information is at least one of medical images, patient measurements, findings, comments, waveforms, Doppler audio, and a medical study report or a flowsheet (Seliger et al.; col.3, lines 6-8).

C. As per claim 3, Seliger et al. discloses the study merging method of claim 2, wherein patient measurement information of the first medical study is computed, based on the patient measurements in the second medical study, upon merging the first and second medical studies (Seliger et al.; col.12, lines 56-65).

D. As per claim 4, Seliger et al. discloses the study merging method of claim 1, wherein stage information of the second medical study is added to the first medical study according to a protocol attribute of the second medical study (Seliger et al.; col.12, lines 1-6).

Examiner understands stage information as information obtained or measured in time intervals or at different stages according to the applicant's specifications, paragraph (0032); therefore examiner considers "changes since the last update" as a stage information.

E. As per claim 7, Seliger et al. discloses the study merging method of claim 1, wherein new medical information of the second medical study is added to the composite study based on the new medical information including a study identifier of the second medical study (Seliger et al.; col.12, lines 17-19 and col.11, lines 59-61).

F. As per claim 8, Seliger et al. discloses the study merging method of claim 1, further comprising identifying the first and second medical studies (Seliger et al.; col.3, lines 8-18) and initiating said merging from a terminal remote from a storage unit containing either of the first and second medical studies (Seliger et al.; col.12, line 65 to col13, line 2).

G. As per claim 9, Seliger et al. discloses a study merging method, comprising: merging a patient's first medical study with a logically related second medical study (Seliger et al.; col.3, lines 6-8), such that medically context-specific information stored in at least one of the first and second medical studies is merged based upon a protocol of at least one of the first and second studies, the protocol being indicated by an attribute of at least one of the first and second studies (Seliger et al.; col.12, lines 1-6).

H. As per claim 10, Seliger et al. discloses the study merging method of claim 9, wherein the medically context-specific information is stage information or measured in different stages (Seliger et al.; col.5, lines 16-17).

I. As per claim 11, Seliger et al. discloses the study merging method of claim 9, wherein the medically context-specific information is measurement information (Seliger et al.; col.2, lines 3-7).

J. As per claim 25, Seliger et al. discloses a medical study merging method (Seliger et al.; col.3, lines 6-8), comprising:

- iv. identifying a patient's related first and second medical studies to be merged (Seliger et al.; col.12, lines 9-12);
- v. merging the first medical study with the second medical study (Seliger et al.; col.3, lines 8-18 and lines 20-23),
- vi. such that a resultant composite study has a study identifier different from at least one of the first and second medical studies (Seliger et al.; col.11, lines 59-65),
- vii. wherein the merging includes an automatic adding of a series of the second medical study to the composite study (Seliger et al.; col. 5, lines 39-42),
- viii. the series of the second medical study having a series identifier the same as a pre-merge corresponding series identifier, with the series of the second medical study including at least an artifact with an artifact identifier the same as a pre-merge corresponding artifact identifier, such that the

composite study includes series and corresponding series identifiers from both the pre-merged first and second medical studies (Seliger et al.; col. 11, lines 59-65).

K. As per claim 26, Seliger et al. discloses the medical study merging method of claim 25, wherein the composite study is the first medical study. (Seliger et al.; col. 3, lines 20-23).

Examiner considers updating of the record has the same meaning as composite study is the first study.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seliger et al. (U.S. Patent No. 5,546,580) in view of applicant's admitted prior art.

A. As per claim 5, Seliger et al. discloses the study merging method of claim 1, wherein the first and second medical studies include unique identifiers according to a DICOM standard.

Seliger et al. fails to expressly teach the unique identifiers according to a DICOM standard, per se, since it appears that Seliger et al. is more directed to updating records such as patient's flowsheets using sequence

number and event information. However, this feature is well known according to the applicant's background information.

As per paragraph (0002) of applicant's background information, DICOM is a prevailing standard for medical imaging management.

18. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seliger et al. (U.S. Patent No. 5,546,580) in view of Cooke Jr. et al. (U.S. Patent No. 6,574,629).

A. As per claim 6, Seliger et al. discloses the study merging method of claim 1, wherein a series instance identifier, for a series of the second medical study, is added to the first medical study without generating a new series instance identifier in the first medical study for said series of the second medical study.

Seliger et al. fails to expressly teach the unique identifiers which does not generate a new series instance identifier in the first medical study, per se, since it appears that Seliger et al. is more directed to updating records using sequence number and event information. However, this feature is well known in the art, as evidenced by Cooke Jr. et al.

In particular, Cooke Jr. et al. discloses a picture archiving and communication system (PACS) (Cooke Jr. et. al.; abstract) wherein merge button merges two or more selected studies into one study folder(Cooke Jr. et. al.; col.21 line 24-26).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have combined updates to a medical database

with merging studies into one folder with the motivation of the folder to be treated as a single study (Cooke, Jr. et. al.; col.21, lines 26-28).

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied arts teach "Medical image diagnostic system" 5,605,153, "Method for validating a digital imaging communication standard message" 5,671,353, "Workstation for medical service" 5,675,744, "Patient information analysis management system and method" 5,713,350, "Workstation for medical service" 5,915,242, "Medical image management system and method" 2002/0016718, "DICOM to XML generator" 2002/0143824 and "Method and system for medical patient data analysis" 6,611,846.


20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dilek B. Cobanoglu whose telephone number is 571-272-8295. The examiner can normally be reached on 8-4:30.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DBC
Dilek B. Cobanoglu
Art Unit 3626


JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER